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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,157	04/20/2005	Satoshi Sato	5077-000234/NP	8309
27572 7590 08/26/2008 HARNESS, DICKEY & PIERCE, P.L.C.			EXAMINER	
P.O. BOX 828	HILLS, MI 48303	MARC, MCDIEUNEL		
DLOUMFIELL	ліггэ, іхіі 48303		ART UNIT	PAPER NUMBER
			3664	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/532,157	SATO ET AL.
Office Action Summary	Examiner	Art Unit
	MCDIEUNEL MARC	3664
The MAILING DATE of this communication ap Period for Reply	ppears on the cover sheet with the c	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLEWHICHEVER IS LONGER, FROM THE MAILING DEVELOPMENT OF THE MAILING	DATE OF THIS COMMUNICATION .136(a). In no event, however, may a reply be tird d will apply and will expire SIX (6) MONTHS from te, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on 13 c This action is FINAL . 2b) ☑ This 3) ☐ Since this application is in condition for allowed closed in accordance with the practice under	is action is non-final. ance except for formal matters, pro	
Disposition of Claims		
4) Claim(s) 3-16,20,21 and 24-26 is/are pending 4a) Of the above claim(s) is/are withdra 5) Claim(s) is/are allowed. 6) Claim(s) 3-16,20,21 and 24-26 is/are rejected 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/ Application Papers 9) The specification is objected to by the Examin	awn from consideration.	
10) ☐ The drawing(s) filed on 4/20/2005 is/are: a) ☐ Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the E	accepted or b) objected to by the drawing(s) be held in abeyance. Section is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
 12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureat * See the attached detailed Office action for a list 	nts have been received. nts have been received in Applicati ority documents have been receive au (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D: 5) Notice of Informal F 6) Other:	ate

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DETAILED ACTION

1. Claims 3-16, 20-21 and 24-26 are pending, and claims 1-2, 17-19 and 22-23 have been cancelled.

2. The abstract of the disclosure is objected to because of the word "means". Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 3-16, 20-21 and 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by **Gräser** Technological Solutions to Autonomous Robot Control

As per claim 4, **Gräser** teaches an autonomous robot wherein said robot controlling means stops the handling job of said robot when it is found, on the basis of a determination result obtained by said handling right determining means, that said subject having issued the job instruction does not have a handling right of said article (see figs. 1 and section 2).

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As per claims 4, 20, 24 and 25, Gräser teaches a system and an associated method of an autonomous robot that contains an article management system for managing articles in a given space (see fig. 1, wherein the giving space can anywhere), comprising: a robot for executing a handling job for an article (see fig. 1); robot controlling means for making said robot execute the handling job in accordance with a job instruction (see fig. 1, particularly the robot controller): sensing means for detecting a state of the space (see fig. 1, particularly the sensors): article identifying means for identifying (see fig. 1, particularly the camera), when an article is handled by a movable body, said handled article in response to a detection result obtained by said sensing means: article handling subject identifying means for identifying when an article is handled by a movable body, an article handling subject that handles said article in response to the detection result obtained by said sensing means (see fig. 1, particularly the arm and the camera); a database for storing information of handling rights set with respect to the articles (see fig. 5, wherein having "a computer program analyses the actions of a demonstration and reproduce the action by assigning known basic actions to the demonstration" has been shown clear evidence of a database for storing information); handling right determining means for determining, on the basis of said information stored in said database whether or not said article handling subject has a handling right of said article in response to an identification result about said article obtained by said article identifying means and an identification result about said article handling subject obtained by said article handling subject identifying means (see fig. 1 as whole); and handling right setting/changing means for setting and/or changing the handling rights and storing the handling rights in said database, wherein when said movable body that handles said article is said robot, said article handling subject identifying means identifies a subject having issued the job

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instruction as said article handling subject that handles said article (see sections 1-8 and figs. 1-5).

As per claim 5, **Gräser** teaches an autonomous robot wherein said handling right setting/changing means sets and/or changes the handling rights on the basis of the detection result obtained by said sensing means (see section 5, wherein "The disturbances which will change the relative positions of the cameras with respect to the robot arm base. Calibration robust, visual control, a method published by Hager [HCM95] represent a basis for a possible solution. The basic idea is the position control based on the image information in both cameras. If the reference point at the gripper is at a specific target point in both images, the gripper is at the target position in 3D space. The target point normally is a significant point at an object, easily detectable by the image software." being taken as setting/changing).

As per claim 6, **Gräser** teaches an autonomous robot wherein said database stores handling history information of the articles on the basis of the detection result obtained by said sensing means (see fig. 5 and section 7), and said handling right setting/changing means sets and/or changes the handling rights of the articles on the basis of said handling history information of the articles stored in said database (see sections 5, 7 and fig. 5, wherein the computer system being taken as means for keeping record/history).

As per claim 7, **Gräser** teaches an autonomous robot wherein said sensing means detects a position of an article present in the space, and said handling right setting/changing means sets and/or changes a handling right of said article in accordance with the position of said article detected by said sensing means.

As per claim 8, **Gräser** teaches an autonomous robot wherein when an article is contained in a container, said handling right setting/changing means makes a handling right of said article accord with a handling right of said container (see figs. 1, 7 and sections 5, 7 as noted above).

With respect to claim 8, **Gräser** handling right of said article in accordance with the temperature of said article detected by said sensing means being taken as a known feature; for instance, in section 4.) "several different sensor systems have been considered in the past" therefore, using a temperature sensor has been taken as design choice.

As per claims 9 and 10, **Gräser** teaches an autonomous robot wherein said sensing means detects shape change of an article, and said handling right setting/changing means sets and/or changes a handling right of said article in accordance with the shape change of said article detected by said sensing means; and in accordance with the weight of said article detected by said sensing means (see fig. 1, wherein each object has different shape and weight).

As per claim 12, **Gräser** teaches an autonomous robot wherein said sensing means detects a position of a movable body, and said handling right setting/changing means sets and/or changes a handling right of an article in accordance with a detection result obtained by said sensing means whether or not there is a movable body in the vicinity of said article (see fig. 1 as a whole).

As per claims 13 and 21, **Gräser** teaches an autonomous robot wherein said handling right setting/changing means sets and/or changes a handling right of an article when a given state is attained in the space (see fig. 1 as noted above).

As per claim 14, **Gräser** teaches an autonomous robot wherein said robot controlling means makes said robot automatically execute the handling job by issuing the job instruction on the basis of a state of the space and the handling rights set and/or changed by said handling right setting/changing means (see sections 1-3 and fig. 1).

As per claim 15, **Gräser** teaches an autonomous robot wherein said handling right setting/changing means sets a handling right of an article to a movable body and/or a movable body group consisting of a plurality of movable bodies (see fig. 4).

As per claim 16, **Gräser** teaches an autonomous robot wherein said handling right setting/changing means sets a handling right with respect to each article and/or each article group consisting of articles having the same attribute (see fig. 1, wherein all the article belongs to the kitchen/same attribute).

- 21. The server of claim 20, wherein said handling right setting/changing means sets and/or changes the handling rights in accordance with a state of the space.
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MCDIEUNEL MARC whose telephone number is (571)272-6964. The examiner can normally be reached on 6:30-5:00 Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi Tran can be reached on (571) 272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/McDieunel Marc/ Examiner, Art Unit 3664

Thursday, August 14, 2008 /KHOI TRAN/ Supervisory Patent Examiner, Art Unit 3664